



Reply To: 3460/3410

Date: December 20, 1993

Mr. Donald Campbell
Harper's Ferry National Historical Park
USDI National Park Service
P.O. Box 65
Harper's Ferry, WV 25425

Dear Mr. Campbell:

On October 18-19, 1993, USDA Forest Service personnel conducted a gypsy moth egg mass survey at Harper's Ferry National Historical Park. The purposes of the survey were to determine gypsy moth population densities, evaluate the effectiveness of the suppression project conducted this May, assess the potential for defoliation and the need for treatment in 1994.

The results of the survey are presented in Tables 1-4. The survey plot locations along with the 1992 treatment areas are shown in Figure 1. Egg mass densities ranged from 0-76 and averaged 23 egg masses per acre in the Short Mountain area and ranged from 0-200 and averaged 58 egg masses per acre in the Maryland Heights area. Egg mass densities ranged from 0-1043 and averaged 239 egg masses per acre in the Loudoun Heights area and ranged from 0-179 and averaged 85 egg masses per acre in areas near Bolivar. Egg mass densities in the Maryland Heights spray block have been reduced 92 percent from the pre-treatment level of 923 egg masses per acre to the current level of 72 egg masses per acre. Egg mass densities in the Loudoun Heights spray block increased 3 percent from the pre-treatment level of 351 egg masses per acre to the current level of 360 egg masses per acre.

Small scattered areas, if any, of light to moderate defoliation (1-60 percent) may occur on Loudoun Heights. No noticeable defoliation is expected elsewhere at the Park. No treatment is recommended at Harper's Ferry National Historical Park in 1994.

I hope this information will be useful to you. Please contact me at 304-285-1555 if you have any questions or require further information.

Sincerely,

RODNEY L. WHITEMAN
Forestry Technician
Forest Health Protection

Enclosures

cc: AO Jan Hacker, WVDA
Bill Hebb Robert Tichenor, MDA
Jim Sherald Betsie Handley, MDA

RLW/mae



Table 1.--Gypsy moth egg mass survey results at Harper's Ferry National Historical Park, Short Mountain Area, October 18-19, 1993.

Plot Number	Number EM/Acre
1	0
2	35
3	0
4	35
5	35
6	0
7	0
8	35
9	76
10	0
11	0
12	0
13	35
14	0
15	56
16	35
17	0
18	56
19	56
20	0

Range = 0-76 EM/Acre

Average = 23 EM/Acre

Table 2.--Gypsy moth egg mass survey results at Harper's Ferry National Historical Park, Maryland Heights Area, October 18-19, 1993.

Plot Number	Number EM/Acre
21	0
22	56
23	179
24	76
25	56
26	76
27	200
28	200
29	76
30	35
31	0
32	0
33	0
34	35
35	35
36	76
37	0
38	0
39	0
40	0
41	0
42	0
43	56
44	117
45	97
46	117
47	56
48	76

Range = 0-200 EM/Acre

Average = 58 EM/Acre

Table 3.--Gypsy moth egg mass survey results at Harper's Ferry National Historical Park, Loudoun Heights Area, October 18-19, 1993.

Plot Number	Number EM/Acre
49	0
50	76
51	0
52	179
53	529
54	1043
55	404
56	570
57	405
58	76
59	76
60	97
61	220
62	364
63	179
64	76
65	0
66	0

Range = 0-1043 EM/Acre

Average = 239 EM/Acre

Table 4.--Gypsy moth egg mass survey results at Harper's Ferry National Historical Park, Areas near Bolivar, October 18-19, 1993.

Plot Number	Number EM/Acre
67	0
68	76
69	179

Range = 0-179 EM/Acre
Average = 85 EM/Acre

Figure 1. -- Gypsy moth egg mass survey plot locations at Harpers Ferry National Historical Park, October 18-19, 1993

